

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

5
NL-13

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,699	07/27/2001	Bruce William Cichowlas	112476.121	9272
7590	07/28/2004			
EXAMINER				
STEVENS, ROBERT				
ART UNIT		PAPER NUMBER		
2176				

Peter M. Dichiara
Hale and Dorr LLP
60 State Street
Boston, MA 02109

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/916,699	Applicant(s) CICHOWLAS ET AL.	
	Examiner Robert M Stevens	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/31/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are pending in Application No. 09/916,699, entitled "Method and System for Multi-Page Web Applications with Central Control", filed 7/27/2001.
2. The Office acknowledges the IDS filed on 1/31/2003. Note that the Davis et al. article has not been considered because it is missing the last page. Please resubmit the entire Davis et al. document with a form 1449 listing Davis et al.

Drawings

3. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
4. The drawings are also objected to because in the flow chart of Figure 11, although there is only one "End" element, there are three terminating elements: 1104, 1116 and 1118. Additionally, decision element 1112 does not provide a clear teaching of when either decision branch is followed. Further, reference numerals indicate elements of a flowchart and not decision branches (refer to #1114).
5. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary,

Art Unit: 2176

the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

Page 17 line 17: the phrase "might directly executable" is grammatically incorrect. Please correct all spelling/grammatical/etc. issues throughout the specification.

7. Additionally, the specification is objected to because:

- a. Discussion of figures 1-4 occurs in the Background section, which typically addresses the prior art. Thorough description of the figures is typically found in the "Detailed Description" section of the application.
- b. Page 17 lines 13, 15 and 20 assign reference numeral "808" to a "source expression". This reference numeral was previously used to indicate an "application program" in Fig. 8. Please reconcile throughout the specification.

- c. Page 24 lines 8, 9 and 12 assign reference numeral "1004" to a "program space", a "persistent session object", and a "program tree", respectively. Please reconcile throughout the specification.
- d. Page 25 lines 18 and 22 assign reference numerals "1026" and "1028" to a "subspace". Please reconcile throughout the specification.
- e. Page 27 line 1: The phrase "normal statement" is vague. Please explain.
- f. Page 23: The code fragment appearing at the top of this page (and the corresponding XML translation appearing after it) contains an infinite *while* (*dowhile* in the XML) loop, which presumably causes the control servlet to display the same two web pages over and over. Note that this code never gets to the *dbrecords.update()* statement, and thus creates enablement issues in regards to the claim limitations drawn to the persisting of implicit and explicit variables. Please correct or explain.

Claim Objections

- 8. Claim 1 is objected to because of the following informalities: the word "invokation" in line 7 is misspelled.
- 9. Claim 2 is objected to because the third limitation ("wherein before execution of a statement that causes the display of a web page, causing the explicitly ...") is awkward/grammatically incorrect.
- 10. Please correct all spelling/grammar/etc. errors in the claims.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. **Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, there is a lack of enablement as to [line 10] “causing implicit state information about the web application to be stored, including storing information identifying a statement to execute” and [line 15] “reading the stored implicit state information and beginning execution at the statement identified thereby.”

Further regarding claim 1, the terms “web application description” (first occurring in line 2) and “web page description” (first occurring in line 5) were not defined in the specification.

Regarding claim 3, there is a lack of enablement as to [line 3] “wherein the explicitly defined state variable is used by the web application description in causing the display of another web page.”

Regarding claim 4, there is a lack of enablement as to [line 9] “having logic to store implicit state information about the web application before execution of any statement that causes the display of a web page” and [line 12] “having logic to restore implicit state information and begin execution at a next statement of the description as identified in the implicit information.”

Further regarding claim 4, the terms “web application description” (first occurring in line 2) and “web page description” (first occurring in line 5) were not defined in the specification.

Regarding claim 5, there is a lack of enablement as to [line 5] “wherein the central controller includes logic to store the explicitly defined state variable before execution of a statement that causes the display of a web page execution of the web application description terminates.”

Regarding claim 6, there is a lack of enablement as to [line 3] “wherein the explicitly defined state variable is used by the web application description in causing the display of another web page.”

Note also that claims 2-3 and 4-5 are (by virtue of their dependencies) also rejected for the same reason as their parent claims.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2176

14. **Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the line 7 phrase “initial invocation thereof” renders the claim vague and indefinite. Invocation of what?

Additionally, in regards to claim 1, there is a lack of antecedent basis for “the web application” in lines 8 and 10 of the claim. It is unclear whether a web application description or the application itself is being referenced here.

Regarding claim 2, the claim begins with a reference to “the web application description”, references “at least two web application descriptions” in the middle, then ends with a reference to “the web application description”. The scope of this claim is vague and indefinite.

Regarding claim 4, there is a lack for antecedent basis for “the web page” in line 5 of the claim. It is unclear whether a web page description or the web page itself is being referenced here. Additionally, a reference to “the web page” is followed by multiple references to “a web page” (see line 10 for two instances).

Additionally in regards to claim 4, there is a lack for antecedent basis for “the web application” in line 10 of the claim. It is unclear whether a web application description or the application itself is being referenced here.

Claims 2-3 and 5-6 are also rejected under 35 USC 112, 2nd paragraph, by virtue of their dependency upon claim 1 or claim 4, as appropriate.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 1-6 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Gosling et al. (US Patent No. 6,405,241, issued June 11, 2002, and filed as a continuation of a continuation application that was filed on Mar. 28, 1997, hereafter referred to as "Gosling") in view of Belfore II et al. article ("An Interactive Land Use VRML Application (ILUVA) with Servlet Assist", Proceedings of the 32nd Conference on Winter Simulation, Orlando, FL, Dec. 2000, pp. 1823-1830, hereafter referred to as "Belfore") and further in view of Marty Hall article ("Session Tracking", Tutorial on Servlets and JSP, Johns Hopkins Applied Physics Lab, © 1999, pp. 1-5, hereafter referred to as "Hall").

Regarding independent method claim 1, Gosling discloses:

A method of controlling multi-page web applications, comprising the acts of:

providing a web application description to a central controller, the web application description having at least one statement to cause the display of a web page; (col. 3 lines 64-67, regarding providing a request to a server (or central controller) in the form of a URL)

Art Unit: 2176

providing at least one web page description having at least one link that points to the central controller (col. 6 lines 64-67, regarding a pointer to the parent server or central controller) and that identifies the web application description; (col. 3 lines 64-67, regarding providing a request to a server (or central controller) in the form of a URL)

the central controller, responding to an initial invocation thereof, causing statements in the web application to be executed; (col. 4 lines 6-9 discussing a web server acceptor thread (central controller) and col. 5 lines 57-58 state that a servlet (application) is executed)

a user invoking the link in the web page thereby re-invoking the central controller (col. 3 lines 64-67, regarding providing a request to a server (or central controller) in the form of a URL),

However, Gosling does not explicitly disclose:

the central controller, responding to the re-invoking, by reading the stored implicit state information and beginning execution at the statement identified thereby.

Belfore, though discloses:

the central controller, responding to the re-invoking, by reading the stored implicit state information and beginning execution at the statement identified thereby. (p. 1287 first sentence of first full paragraph, stating that "servlets can be used to restore prior sessions")

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit of Gosling because to do so would enable a programmer to configure an object so that it appears identical to the prior session as taught by Belfore in the first sentence of the right column of text on page 1827.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit Gosling because these

Art Unit: 2176

references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

before execution of the at least one statement that causes the display of a web page, causing implicit state information about the web application to be stored, including storing information identifying a statement to execute;

Belfore, though discloses:

before execution of the at least one statement that causes the display of a web page, causing implicit state information about the web application to be stored, including storing information identifying a statement to execute; (p. 1287 first sentence of first full paragraph, stating that "servlets can be used to restore prior sessions")

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit of Gosling because to do so would enable a programmer to configure an object so that it appears identical to the prior session as taught by Belfore in the first sentence of the right column of text on page 1827.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit Gosling because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

Art Unit: 2176

upon executing the at least one statement that causes the display of a web page, terminating execution of the web application description;

Hall, though, discloses:

upon executing the at least one statement that causes the display of a web page, terminating execution of the web application description;
(page 4 code listing, the last line (the entire out.println() method) is executed displaying the web page shown on page 5 and then execution terminates (at the final curly brace "}")).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Note that it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore and Hall for the benefit Gosling because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Art Unit: 2176

Regarding claim 2, which is dependent upon claim 1, Gosling does not explicitly disclose:

wherein the web application description has at least two statements to cause the display of a web page and

However, it would have been obvious at the time of the invention to place in a web application description two or more statements to cause the display of a web page since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Furthermore, Gosling does not explicitly disclose:

at least one explicitly defined state variable and

However, Hall discloses:

at least one explicitly defined state variable and (p. 4, refer to the variable "oldAccessCount" at approximately line 15 of the ShowSession class definition code)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore and

Art Unit: 2176

Benson because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Gosling also does not explicitly disclose:

wherein at least two web page descriptions are provided each having at least one link that points to the central controller and that identifies the web application description, and

However, it would have been obvious at the time of the invention to provide two or more web page descriptions each having at least one link that points to the central controller and that identifies the web application description age since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Additionally, Gosling does not explicitly disclose:

wherein before execution of a statement that causes the display of a web page, causing the explicitly defined state variable to be stored, and

However, Hall discloses:

wherein before execution of a statement that causes the display of a web page, causing the explicitly defined state variable to be stored, and (p. 4, refer to the "session.putValue()" method at approximately line 25 of the ShowSession class definition code, in which the explicitly defined state variable "accessCount" is stored before display via the out.println() method.)

Art Unit: 2176

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

wherein upon executing any statement that causes the display of a web page, terminating execution of the web application description.

However, Hall discloses:

wherein upon executing any statement that causes the display of a web page, terminating execution of the web application description. (page 4 code listing, the last line (the entire out.println() method) is executed displaying the web page shown on page 5 and then execution terminates (at the final curly brace “}”))

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

Art Unit: 2176

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Regarding claim 3, which is dependent upon claim 2, Gosling does not explicitly disclose:

wherein the web application description includes statements to update the explicitly defined state variable in response to information provided by a user upon invoking a web page, and

Hall, however, discloses:

wherein the web application description includes statements to update the explicitly defined state variable in response to information provided by a user (page 3 paragraph under section "2.3 Associating Information with a Session", especially "putValue() replaces any previous values", and the last line "session.putValue("previousItems", previousItems)" of the code fragment in section 2.3) upon invoking a web page (page 1, first paragraph under heading "1. What is Session Tracking?", especially "When you [a user] move from the page where ... to the page that ..."), and

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

Art Unit: 2176

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Gosling does not explicitly disclose:

wherein the explicitly defined state variable is used by the web application description in causing the display of another web page.

Hall, however, discloses:

wherein the explicitly defined state variable is used by the web application description in causing the display of another web page. (top of page 5, shows a web page with a table cell showing the value of "3" as the number of previous accesses, which is the result of executing the code on page 4), and

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Regarding independent system claim 4, Gosling discloses:

A system for multi-page web applications, comprising:
a web application description stored at a web server, the web application description having at least one statement to cause the display of a web page; (col. 3 lines 64-67, regarding providing a request to a server (or central controller) in the form of a URL)
at least one web page description stored on at least one web server the web page having at least one link that points to the central controller (col. 6 lines 64-67, regarding a pointer to the parent server or central controller) and that identifies the web application description; (col. 3 lines 64-67, regarding providing a request to a server (or central controller) in the form of a URL)
a central controller having logic to read the web application description and to execute the statements thereof (col. 4 lines 6-9 discussing a web server acceptor thread (central controller) and col. 5 lines 57-58 state that a servlet (application) is executed)

However, Gosling does not explicitly disclose:

and having logic to store implicit state information about the web application before execution of any statement that causes the display of a web page,

Belfore, though discloses:

and having logic to store implicit state information about the web application before execution of any statement that causes the display of a web page, (p. 1287 first sentence of first full paragraph, stating that "servlets can be used to restore prior sessions")

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit of Gosling because to do so would enable a programmer to configure an object so that it appears identical to the

Art Unit: 2176

prior session as taught by Belfore in the first sentence of the right column of text on page 1827.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit Gosling because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

before execution of the at least one statement that causes the display of a web page, causing implicit state information about the web application to be stored, including storing information identifying a statement to execute;

Belfore, though discloses:

before execution of the at least one statement that causes the display of a web page, causing implicit state information about the web application to be stored, including storing information identifying a statement to execute; (p. 1287 first sentence of first full paragraph, stating that "servlets can be used to restore prior sessions")

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit of Gosling because to do so would enable a programmer to configure an object so that it appears identical to the prior session as taught by Belfore in the first sentence of the right column of text on page 1827.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit Gosling because these

Art Unit: 2176

references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

wherein the display of a web page terminates execution of the web application description;

Hall, though, discloses:

wherein the display of a web page terminates execution of the web application description; (page 4 code listing, the last line (the entire out.println() method) is executed displaying the web page shown on page 5 and then execution terminates (at the final curly brace "}"))).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Note that it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore and Hall for the benefit Gosling

Art Unit: 2176

because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

and having logic to restore implicit state information and begin execution at a next statement of the description as identified in the implicit state information.

Belfore, though, discloses:

and having logic to restore implicit state information and begin execution at a next statement of the description as identified in the implicit state information. (p. 1287 first sentence of first full paragraph, stating that "servlets can be used to restore prior sessions").

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit of Gosling in view of Hall because to do so would enable a programmer to configure an object so that it appears identical to the prior session as taught by Belfore in the first sentence of the right column of text on page 1827.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore for the benefit Gosling in view of Hall because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Note that it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Belfore and Hall for the benefit Gosling

Art Unit: 2176

because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Regarding claim 5, which is dependent upon claim 4, Gosling does not explicitly disclose:

wherein the web application description has at least two statements to cause the display of a web page and

However, it would have been obvious at the time of the invention to place in a web application description two or more statements to cause the display of a web page since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Furthermore, Gosling does not explicitly disclose:

at least one explicitly defined state variable and

However, Hall discloses:

at least one explicitly defined state variable and (p. 4, refer to the variable "oldAccessCount" at approximately line 15 of the ShowSession class definition code)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of

Art Unit: 2176

times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore and Benson because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Gosling also does not explicitly disclose:

wherein at least two web page descriptions are provided each having at least one link that points to the central controller and that identifies the web application description, and

However, it would have been obvious at the time of the invention to provide two or more web page descriptions each having at least one link that points to the central controller and that identifies the web application description age since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Additionally, Gosling does not explicitly disclose:

wherein the central controller includes logic to store the explicitly defined state variable before execution of a statement that causes the display of a web page, and

However, Hall discloses:

wherein the central controller includes logic to store the explicitly defined state variable before execution of a statement that causes the display of a web page, and (p. 4, refer to the "session.putValue()" method at approximately line 25 of the ShowSession class definition code, in which the explicitly defined state variable "accessCount" is stored before display via the out.println() method.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Additionally, Gosling does not explicitly disclose:

wherein upon executing any statement that causes the display of a web page, the web application description terminates.

However, Hall discloses:

wherein upon executing any statement that causes the display of a web page, the web application description terminates. (page 4 code listing, the last line (the entire out.println() method) is executed displaying the web page shown on page 5 and then execution terminates (at the final curly brace "}"))

Art Unit: 2176

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Regarding claim 6, which is dependent upon claim 5, Gosling does not explicitly disclose:

wherein the web application description includes statements to update the explicitly defined state variable in response to information provided by a user upon invoking a web page, and

Hall, however, discloses:

wherein the web application description includes statements to update the explicitly defined state variable in response to information provided by a user (page 3 paragraph under section "2.3 Associating Information with a Session", especially "putValue() replaces any previous values", and the last line "session.putValue("previousItems", previousItems)" of the code fragment in section 2.3) upon invoking a web page (page 1, first paragraph under heading "1. What is Session Tracking?", especially "When you [a user] move from the page where ... to the page that ..."), and

Art Unit: 2176

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Gosling does not explicitly disclose:

wherein the explicitly defined state variable is used by the web application description in causing the display of another web page.

Hall, however, discloses:

wherein the explicitly defined state variable is used by the web application description in causing the display of another web page. (top of page 5, shows a web page with a table cell showing the value of "3" as the number of previous accesses, which is the result of executing the code on page 4), and

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit of Gosling in view of Belfore and Benson because to do so would enable a programmer to keep track of the number of times a page is accessed as taught by Hall in the code of page 4 and the figure on page 5.

Art Unit: 2176

It also would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Hall for the benefit Gosling in view of Belfore because these references were all applicable to the same field of endeavor, i.e., Java servlet programming.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-patent Literature

Benson, Jr., Brent W., et al., "Web-based Applications You Can Live With", ACM SIGPLAN Notices, Volume 35, Issue, March 2000, pp. 21-24.

Caroli, Paulo, et al., "An Architecture for the Evolution of Web Applications (poster session)", Conference on Object Oriented Programming Systems Languages and Applications, Minneapolis, MN, © 2000, pp. 83-84 (ISBN: 1-58113-307-3).

Cheung, Wing Hang, et al., "Integrating Digital Libraries by CORBA, XML and Servlet", JCDL '01, Roanoke, VA, June 24-28 2001, p. 472 (ACM: 1-58113-345-6/01/0006).

Flanagan, David, Java Examples in a Nutshell, O'Reilly & Associates, Inc., Cambridge, © 1997, pp. 263-271.

Hall, Marty, "First Servlets", Tutorial on Servlets and JSP, Johns Hopkins Applied Physics Lab, © 1999, pp. 1-5.

Morrison, Michael, et al., Java 1.1, 3rd Edition, Sams.net Publishing, Indianapolis, IN, © 1997, pp. 1253-1265 and 1287.

Reilly, David, "State and Session Tracking with Java Servlets Part 1: Using Cookies", www.developer.com/java/other/article.php/616801, October 19, 1999, pp. 1-8 (includes 3 page code listing).

Reilly, David, "State and Session Tracking with Java Servlets Part 2: Securing Data", www.developer.com/java/other/article.php/616831, October 26, 1999, pp. 1-8 (includes 3 page code listing).

Shands, Deborah, et al., "Secure Virtual Enclaves:: Supporting Coalition Use of Distributed Application Technologies", ACM Transactions on Information and System Security, Vol. 4, No. 2, May, 2001, pp. 103-133.

Art Unit: 2176

Welzel, Doug, "Java Servlets: An Introduction to Writing and Running Java Servlets on Linux", Linux Journal, Volume 1999, Issue 66es, Article No. 27, October, 1999, pp. 1-6 (ISSN: 1075-3583).

US Patent Application Publications

Gosling et al	2001/0011298
Barth et al	2001/0054020
Miller	2002/0103822
Colasurdo et al	2002/0161839
von Klopp Lemon	2002/0103896
Zajac	2002/0120547
Goward et al	2002/0120677
von Klopp Lemon	2002/0156881

US Patents

Smith	5,835,724
Gosling et al	5,928,323
Murray	5,944,781
Hayes, Jr.	6,105,063
Herriot	6,134,583
LeBlanc	6,185,730
Fowlow	6,260,078
Becker et al	6,286,051
Desrochers	6,553,405
Sexton et al	6,604,182
Friesen	6,636,863
Uppiano et al	6,638,315
Francis et al	6,643,708


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (703) 605-4367. The examiner can normally be reached on M-F 7:00 - 3:30.

Art Unit: 2176

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens
Art Unit 2176
Date: July 15, 2004


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

rms